



## Health Beliefs to Deal with High Blood Pressure among Primary School Teachers in Nasiriyah City

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**Abstract:** Aims: This study aimed at assess the health beliefs to deal with high blood pressure among primary school teachers in the city of Nasiriyah.

Background: People's attitudes toward hypertension and its complications are influenced by their beliefs about the condition. The health belief model (HBM), one of the earliest models to describe how to change good habits and the psychological processes that follow them, can be used to study health beliefs concerning hypertension. The expected value theory is a framework for understanding how to influence people to adopt healthy behaviors (HBM). The main assumptions of the model are that people should recognize that their unhealthy habits leave them vulnerable to unfavorable consequences (perceived susceptibility), that the severity of these negative effects can be severe (perceived severity), that there are useful techniques for prevention or control (perceived benefits), and that there are costs to adhere to healthy behavior (perceived barriers), while (work references) believe that there are cues in the environment that lead to the adoption of healthy habits and that they have the potential to engage in a healthy activity (self-efficacy).

Material and Method: a six-month cross-sectional study carried out in Nasiriyah, the Thi-Qar Governorate's capital, from November 2022 to April 2023. It contained 300 samples that were obtained by the stratified cluster sampling method from 30 different schools.

Results: The study showed that the teachers' health beliefs are distributed as follows. 4 (1.33%) did not have good

health beliefs, 224 (74.66%) of the teachers had fair health beliefs, and 72 (24%) had good health beliefs. Also, some demographic characteristics showed statistically significant associations with some beliefs about high blood pressure. Such as age, educational level, and the presence of high blood pressure among teachers and their entry into courses on dealing with high blood pressure, ( $p < 0.05$ ).

Conclusion: It was found that 224 teachers (74.67%) had fair health beliefs regarding high blood pressure.

**Key words:** Health belief model, Hypertension, Health promotion.

## Introduction

People's perceptions of their own health and their faith in healthy control ideologies are among the psychological notions that have been explored in the fields of health and disease. Unhealthy habits and behaviors have been found to be the main cause of chronic disease. One of the essential components of healthy behaviors is people's beliefs. Beliefs are the ideas that give events meaning, influence how we experience them, and regulate the kinds and amounts of behaviors and emotions. Beliefs have a significant impact on people's mental, physical, and emotional health.(Afsahi & Kachooei, 2020). Hypertension (HT) is a chronic medical disorder marked by chronically high artery blood pressure. Most of the time, it has no symptoms. On the other hand, chronic renal disease, atrial fibrillation, peripheral vascular disease, heart failure, and stroke are all greatly influenced by long-term high blood pressure. The main factor contributing to early deaths globally is high blood pressure.(Asresahegn *et al.*, 2017). The attitudes of people with high blood pressure toward their condition and its complications are influenced by their beliefs about high blood pressure. Health Belief Model (HBM) demonstrates these beliefs, which consists of six components (perceived susceptibility, perceived severity, perceived barriers, perceived benefits, cues to action, and self-efficacy)(Sadeq & Lafta, 2017). The health belief model is one of the first models to describe how to change healthy habits and the psychological processes that accompany them. Expected value theory describes how to motivate people to engage in healthy habits, and it is built on (HBM). The main assumptions of the model are that people should recognize that their unhealthy habits leave them vulnerable to unfavorable consequences (perceived susceptibility), that the severity of these negative effects can be severe (perceived severity), that there are useful techniques for prevention or control (perceived benefits), and that there are costs to adhere to healthy behavior (perceived barriers), while (cues to action) believe that there are cues in the environment that lead to the adoption of healthy habits and that they have the potential to engage in a healthy activity (self-efficacy)(Amraei *et al.*, 2020).

## METHODS

The study was conducted for a period of 6 months, from November 2022 to April 2023, in the city of Nasiriyah, the capital of Thi-Qar Governorate. To achieve the objectives of this study, the cross section was described and a group of schools were selected to take the sample.

300 samples were collected from 30 schools in the city of Nasiriyah, the center of Thi-Qar Governorate. It is divided into five regions, north, south, east, and west. In the center of each region, 6 schools were chosen.

Has been created questionnaire containing sociodemographic variables and six topics of health beliefs: perceived susceptibility, perceived severity (as perceived threats), perceived benefits, perceived barriers, and cues to action and self-efficacy.

SPSS version 26 was used to analyze the data. Means, SD (standard deviation), and percentages were used to represent all sociodemographic data. Statistics were taken into account Significant whenever the P value is less than 0.05. The results are displayed using bar charts, and tables.

## RESULTS

**Table 1): Sociodemographic characteristics of Sample (N = 300)(**

Variables		F	%
Age (year)	20-30	94	31.3
	31-40	71	23.7
	41-50	71	23.7
	51-60	64	21.3
Gender	Male	132	44.0
	Female	168	56.0
Marital Status	Married	246	82.0
	Single	37	12.3
	Divorced	11	3.7
	Widower	6	2.0
Economic Status	Enough	190	63.3
	Somewhat Enough	103	34.3
	Not Enough	7	2.3
Educational Level	Diploma	201	67.0
	Bachelor	92	30.7
	Master	6	2.0
	PhD	1	0.3
Residency	Urban	283	94.3
	Rural	17	5.7
Do you have high blood pressure?	No	208	69.3
	Yes	92	30.7
Does a family or relative have high blood pressure?	No	62	20.7
	Yes	238	79.3
Have you entered courses on how to deal with high blood pressure?	No	291	97.0
	Yes	9	3.0

The aforementioned characteristics of the studied group are summarized in this table (**Table 1**), in which there were (30) school enrolled in this study, their ages were between (20 – 60) years and were almost equally distributed on these age groups. Male and females were 44% and 56%

respectively, in which (132) male and (168) female. Almost Three-quarters (82%) of the teachers were had married and (12.3%) single, (3.7%) divorced, (2%) widower.

Regarding the economic status of teachers (63.3%) was enough level, (34.3%) somewhat enough, (2.3%) not enough.

For the educational level of teachers (67%) (30.7%) (2%) (0.3%) diploma and bachelor and master and PhD respectively.

The Residency of the teachers was (94.3%) from urban area and (5.7%) from rural area.

The number of teachers who suffer from high blood pressure was 92 (30.7%) and 238(79.3%) have high blood pressure in family, relative and 9 (3%) entered courses on how to deal with high blood pressure.

**(Table 2) Distribution of overall Response Healthy Beliefs Assessment for Teachers**

Items	Assessment	F	%
overall Response Healthy Beliefs for Teachers	Not Good	4	1.33
	Fair	224	74.67
	Good	72	24
Totally		300	100%

Finding  
s reveals that  
224 teachers  
(74.67%)  
have fair  
health beliefs  
regarding  
high blood  
pressure.

**DISCUSSION**  
Discuss

#### **ion of distribution of the teachers by their demographic characteristics**

The findings are displayed in( **Table1**) together with the sociodemographic details of the teachers. Based on the results of the study. The ages ranged from (20-60) years distributed evenly into age groups, and the age group (20-30) was the highest among the groups with a frequency of (94) and a rate of (31.3%). The reason for this is that most of the respondents are newly hired to work in schools. In contrast to a cross-sectional study titled “Risk Factors for Cardiovascular Diseases Among School Teachers in Benghazi, it was found that the age group between (30-39) is the highest with a rate of (48.4%)(Greiw et al., 2010).

The percentage of males and females was 44% and 56%, respectively, of which (132) males and (168) females. Despite taking into account the participation rate in the questionnaire equally between the sexes, the percentage of females was higher, and the reason for that is that the number of females in schools is greater than the number of males, according to the statistics of the General Directorate of Education in the governorate. The number of females is (3583) and the number of males is (815). This statistic is close to the results that appeared in the study conducted in the Rusafa

side of Baghdad city, where the percentage of males was (48.3%) and females (51.7%).(Ahmed & Naji, 2021).

Nearly three-quarters of the teachers (82%) are married, (12.3%) are single, (3.7%) are divorced, and (2%) are widows. As for the economic status of teachers (63.3%), he answered that it is sufficient because they receive sufficient salary (34.3%), somewhat sufficient (2.3%), or not sufficient. As for the educational level of teachers (67%) (30.7%) (2%) (0.3%), they have a diploma, bachelor's, master's and doctorate degrees, respectively, where the percentage of diploma is the highest because the study was conducted on primary schools and most of the teachers are diploma holders. The teachers' residency was (94.3%) from urban and (5.7%) from rural. This high percentage is due to the fact that the study was conducted in the center of the governorate (the city). In a similar study conducted on primary school teachers in the city of Baghdad (Ahmed & Naji, 2021), it was found that the percentage of married people is (66%), the percentage of bachelors is (17.4%), the percentage of divorced is (10.3%), and the percentage of widows is (3.7%). And (66%) answered that the level of living is sufficient. The educational level was (62%) of them diploma. And (95%) lived in the city.

The number of teachers with high blood pressure was 92 (30.7%), 238 (79.3%) had high blood pressure in the family, and 9 (3%) attended courses on how to deal with high blood pressure. Positive family history with High blood pressure has been shown to be a risk factor of hypertension agreed with this finding. Yassin mentioned the outcome in Maysan, Iraq (Obied Yaseen, 2006).

#### **Discuss teachers' responses about the health beliefs model**

This study examined the health beliefs of (300) participants, as there were (30) schools enrolled in this study. Through the results that appeared in the study, and according to the teachers' health beliefs, the (table 2) shows the distribution of the teachers' beliefs. 4 (1.33%) had not good assessment, 224 (74.66%) of the teachers had a fair assessment, and 72(24%) had a good assessment. Little studies in this field have been conducted in other nations. One of the studies found (*Abd El Aziz et al., 2016*). In order to avoid urogenital infections, pregnant women in Egypt are given a health education program based on the HBM model over the course of three 30- to 45-minute sessions. They noticed a considerable improvement in the four primary HBM components two months following the intervention (perceived sensitivity, perceived severity, perceived benefits, and perceived barriers). In another study (Wickremasinghe & Ekanayake, 2017). utilized HBM-based instruction to enhance oral health practices among Sri Lankan schoolchildren. With the exception of self-efficacy, all (HBM) components showed a substantial improvement between the (HBM) and control groups following the intervention. In terms of perceived sensitivity, our findings are in opposition to those of Abdel-Aziz et al. and stand in contrast to Wickremasinghe and Ekanayake's findings in terms of perceived self-efficacy. The variation in the study population, study area, and sickness could be the cause of the variance.

#### **CONCLUSION**

Health beliefs about high blood pressure among primary school teachers were systematically examined using HBM. In this study and through the results that emerged, it was found that (224) teachers about (74.67%) had fair models regarding high blood pressure.

#### **Recommendation**

The information obtained will be useful for planning and delivering health education or health promotion programs based on the needs and shortcomings of teachers and the general public.

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